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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/722,070

11/24/2003

James Block

D-1183 R1

4162

28995

7590

12/09/2005

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EXAMINER

HESS, DANIEL A

ART UNIT

PAPER NUMBER

2876

DATE MAILED: 12/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/722,070	Applicant(s) BLOCK ET AL.	
	Examiner Daniel A. Hess	Art Unit 2876	

**– The MAILING DATE of this communication appears on the cover sheet with the correspondence address –**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 24 November 2003.  
 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.  
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.  
     4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) ☒ Claim(s) 1-19 is/are allowed.  
 6) ☒ Claim(s) 20 is/are rejected.  
 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.  
 10) ☒ The drawing(s) filed on 11/24/03 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☐ All    b) ☐ Some \* c) ☐ None of:  
         1. ☐ Certified copies of the priority documents have been received.  
         2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
         3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |                                                                                                                        |                                                                                         |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                            | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____                                                |

### **DETAILED ACTION**

This action is in response to 11/24/2003 filing by the applicants, which has been entered into the electronic file of record.

#### ***Claim Objections***

Claims 1, 2, 5, 6, 8, 9, 10 and 18 are objected to because of the following informality: the acronym 'XFS' appears without explanation within the claim of what the acronym stands for: see claim 1, page 1, lines 9, 10, 12 and 13; claim 2, line 4; claim 5, lines 3 and 5; claim 6, line 4; claim 8, lines 3-5; claim 9, lines 3-5, 7; claim 10, line 12 and claim 18, line 3. A proper way of addressing this would be to first use the full wording for what the acronym stands for prior to first use, followed by the acronym in parentheses, i.e.: eXtensions for Financial Services (XFS).

Appropriate correction is required.

Regarding claims 1, 2, 5, 6, 8, 9, 10 and 18, the examiner also believes some clarification would be helpful because the specification appears to refer to two kinds of extensions for financial services, namely WOSA/XFS (page 3) and J/XFS (page 4). The examiner wishes to clarify whether the term eXtensions for Financial Services (XFS) is an industry-accepted term whose meaning is understood in the industry or whether XFS is just part a trade name for standards by particular companies. If XFS is part of a trade name, then it would not belong in the claim (see MPEP 7.35.01). Instead it would have to be replaced with a description of what the XFS layer actually is.

Claim 15 is objected to because of the following informality: the acronym 'ODS' appears without explanation within the claim of what the acronym stands for: see claim 15, lines 2. If the specification lacks a clear spelling out of the acronym, as appears to be the case, then the acronym should be defined based on what it means. Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 20 is rejected under 35 U.S.C. 102(b) as being anticipated by Shepley et al. (US 2001/0037301).

Limitations of the claims are given in italics below, followed in each case by a description of how Shepley et al. meets those particular limitations.

*A method comprising:*

*in an ATM including a cash dispenser, and having therein an application layer and a hardware layer,*

There is (Shepley, paragraph [0031]) "Here the ATM architecture 20 includes an computer 22 that is in operative connection with a plurality of transaction function devices 42.

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Such transaction function devices may include for example such devices as a note dispenser, coin dispenser, card reader, printer, key pad, display device, function keys, depositor, cash acceptor or any other hardware device that may be operatively connected to an ATM. “

In each of figures 1-3 of Shepley, an application layer, reference numerals 114, 214 and 24 respectively, can be seen in the ATM. Figure 4 shows this application layer in great detail.

*a) receiving at least one input through at least one input device to carry out at least one test function;*

From paragraph [0026] of Shepley et al.:

“the diagnostic application may enable a programmer or service technician to directly access ATM hardware through the corresponding diagnostic interface for trouble shooting, repair and other maintenance purposes.”

Another word for diagnostics performed by a service technician are tests. The technician must have some kind of input device available to him (inherent) because he is interacting with the ATM.

*b) operating the ATM responsive to the at least one input in (a) to attempt to carry out the at least one test function;*

From paragraph [0026] of Shepley, “The diagnostic interface provides external applications with access to specific low level features of the hardware that corresponds to the device drivers. For example a cash dispenser device driver may be adapted to include an interface for manipulating individual motors or sensors in the corresponding cash dispenser transaction function device. “

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Thus the technician, via the diagnostic tool is able to have actual access to the hardware to perform diagnostics, a.k.a. tests.

*c) determining through operation of the ATM if the at least one test function was carried out successfully;*

Clearly a technician who has access to the hardware need only to try to operate certain hardware directly, i.e. “manipulating individual motors or sensors” as in (b) and watch how the ATM responds to see if the test worked. For example, the operator can use the diagnostic interface to turn on a motor which is part of a bill feed mechanism and observe if a bill is actually fed.

*d) responsive to a determination in (c) that the at least one test function was not carried out successfully, providing at least one output from an output device of the ATM indicative of a problem with at least one of the application layer and hardware layer.*

See for example paragraph [0026]; claims 16-18 of Shepley et al. Here, ‘output’ can be understood broadly. For example, any reaction by the ATM to diagnostic activities by the technician can be considered output, not just clear messages in plain language on a screen. In Shepley, for example, if a motor is malfunctioning, the technician can observe this and come to a conclusion about problems.

Note that the claim does not indicate that the ATM must perform the determination, but simply that the determination is made “through the operation of the ATM.” Also, the claim does not recite that the ATM must indicate specific information about the problem, but merely that there is some kind of output. In Shepley et al., the output is the set of reactions of the hardware to different diagnostic tests.

*Allowable Subject Matter*

Claims 1-19 are allowed. The following is a statement of reasons for the indication of allowable subject matter:

A number of aspects of the methods recited in independent claims 1, 9 and 12 are taught in the prior art of record. For example, it is known to use an XFS layer of an ATM to interface with a plurality of hardware devices of the ATM, such that the XFS layer has an application interface which interfaces with the application above it and a hardware interface which interfaces with a hardware layer including hardware device drivers, and one can observe whether the hardware is working.

The prior art fails to teach or fairly suggest a determination being made **by the ATM** as to whether a malfunction of hardware is due to a problem of the hardware or the software layer and outputting the result of this determination.

The nearest prior art teaches that an operator could access the hardware layer directly and thus find out if a problem is in a hardware layer (otherwise it must be in an application layer). But the present claims require that software in the ATM makes this determination (not an operator/technician) and outputs the result of this determination to an output device. This is neither shown nor suggested in the prior art.

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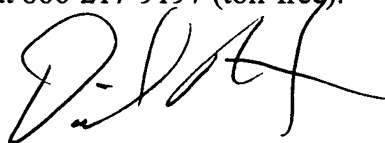
*Conclusion*

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Chmielewski et al. (US 6,005,704), Zeanah et al. (US 5,993,816), Coutts (US 5,563,393) and Utsumi (US 5,974,119) all teach ATMs with certain, very limited diagnostic functions.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel A. Hess whose telephone number is (571) 272-2392. The examiner can normally be reached on 8:00 AM - 5:00 PM M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Lee can be reached on (571) 272-2398. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Daniel A Hess  
Examiner  
Art Unit 2876

12/02/2005